ABSTRACT

A ring type starter/generator comprises ring shaped stator, ring shaped rotor and a set of large current-conversion controller with low power consumption. Ring shaped stator is mounted on engine body or water pump housing, and ring shaped rotor is mounted on engine flywheel or pump impeller. With the help of new integrated electromechanical construction, constituted of shaft, bearings and housing of engine or pump machinery, starter/generator and engine or pump can operate coaxially and directly drive each other. Said ring type starter/generator changes and simplifies conventional construction of electric machinery and mechanical transmission mode of automobile, so that the association of electric machinery with engine is more reasonable and compact, realizing a highly efficient integrated mechanical and electrical construction, and improving to the utmost extent in reliability and working efficiency in transmission of electric machinery. In addition it has advantages of low working temperature, larger power in electric generation/power output, high efficiency, larger transmission torque as well as elimination of cooling device.